Projects
DirectFB on STM32

• Title:
  • Porting DirectFB library on top of STM32 based boards

• Type: thesis

• Objectives:
  • Port DirectFB on STM32 boards
  • Support FreeRTOS
  • Implement the hw acceleration module to improve performance
  • Provide benchmarks figures (sw vs. hw accelerations)

• Skills:
  • Graphics theory libraries
  • Operating System (FreeRTOS)
  • Programming languages: C, C++
  • Libraries: DirectFB

• Complexity: medium/high

• Reference: www.directfb.org
Minimal Debugger IDE

• Title:
  • Eclipse based minimal debugger IDE

• Type: thesis

• Objectives:
  • Implement an Eclipse RCP providing a graphical environment to support the debugging of Linux kernel and Linux application on ST target boards

• Skills:
  • Eclipse framework and RCP application
  • GNU debugger (gdb)
  • Programming languages: Java, C
  • Tools: Eclipse (multicore debugging)

• Complexity: medium/high

• Reference: Data Display Debugger (http://www.gnu.org/software/ddd)
Multimedia application demo

• Title:
  • A HTML-5 based multimedia player (no C code)

• Type: stage/thesis

• Objectives:
  • Provide a multimedia application (player) on WebKit framework (QtMediaHub)

• Skills:
  • Multimedia application development
  • GStreamer framework
  • OpenGL ES
  • Programming languages: HTML, HTML-5, CSS-3
  • Libraries: GTK

• Complexity: medium/high